Florida Mathematics (B.E.S.T.)

Grade 3: Access Points

Algebraic Reasoning

1 Solve multiplication and division problems.

- 1 Apply the commutative property of multiplication to find a product of one-digit whole numbers. MA.3.AR.1.AP.1
- 2a Solve one- and two-step addition and subtraction real-world problems within 100. MA.3.AR.1.AP.2A
- 2b Solve one-step multiplication and division real-world problems. Multiplication may not exceed two single-digit whole numbers and their related division facts. MA.3.AR.1.AP.2B

2 Develop an understanding of equality and multiplication and division.

- 1 Explore division as multiplication with a missing factor using the relationship between multiplication and division. MA.3.AR.2.AP.1
- 2 Determine if multiplication or division equations with no more than three terms are true or false. Multiplication may not exceed two single-digit whole numbers and their related division facts. MA.3.AR.2.AP.2
- 3 Determine the unknown whole number in a multiplication or division equation, relating three whole numbers, with the product or quotient unknown (e.g., 2 × 5 = __, 10 ÷ 5 = __). Multiplication may not exceed two single-digit whole numbers and their related division facts. MA.3.AR.2.AP.3

3 Identify numerical patterns, including multiplicative patterns.

- 1 Determine whether a whole number from 1 to 100 is even or odd. MA.3.AR.3.AP.1
- 2 Explore that a whole number is a multiple of each of its factors. Factors not to exceed single-digit whole numbers. MA.3.AR.3.AP.2
- 3 Extend a numerical pattern when given a one-step addition rule (e.g., when given the pattern 5, 10, 15, use the rule add 5 to extend the pattern).. MA.3.AR.3.AP.3

Data Analysis and Probability

1 Collect, represent and interpret numerical and categorical data.

- 1a Sort and represent categorical data (up to four categories) with whole-number values using tables, pictographs or bar graphs. Select appropriate title, labels and units. MA.3.DP.1.AP.1A
- 1b Explore representing numerical data with whole-number values using line plots. MA.3.DP.1.AP.1B
- 2a Interpret data with whole-number values represented with tables, pictographs or bar graphs to solve one-step “how many more” and “how many less” problems. MA.3.DP.1.AP.2A
- 2b Interpret data with whole-number values represented with scaled pictographs or scaled bar graphs. For scaled pictographs, symbols used may only represent quantities of 2, 5 or 10 and only whole symbols may be used. For scaled bar graphs, intervals may only represent quantities of 2, 5 or 10. MA.3.DP.1.AP.2B
- 2c Explore interpreting data with whole-number values represented with line plots. MA.3.DP.1.AP.2C

Fractions

1 Understand fractions as numbers and represent fractions.

1. Explore unit fractions in the form 1/n as the quantity formed by one part when a whole is partitioned into n equal parts. Denominators are limited to 2, 3 and 4. MA.3.FR.1.AP.1
2. Explore fractions, less than or equal to a whole, in the form of m/n as the result of adding the unit fraction 1/n to itself m times. Denominators are limited to 2, 3 and 4. MA.3.FR.1.AP.2
3. Read and generate fractions, less than or equal to a whole, using standard form. MA.3.FR.1.AP.3

2 Order and compare fractions and identify equivalent fractions.

1. Compare fractional numbers with the same denominator. Denominators are limited to 2, 3 and 4. MA.3.FR.2.AP.1
2. Using a visual model, recognize fractions less than a whole that are equivalent to fractions with denominators of 2, 3 or 4 (e.g., 4/8 is equivalent to 1/2). MA.3.FR.2.AP.2

Geometric Reasoning

Describe and identify relationships between lines and classify quadrilaterals.

1. Identify points, lines, line segments, perpendicular lines and parallel lines. Identify these in two-dimensional figures. MA.3.GR.1.AP.1
2. Identify quadrilaterals based on their defining attributes. Quadrilaterals include parallelograms, rhombi, rectangles, squares and trapezoids. MA.3.GR.1.AP.2
3. Identify line-symmetric two-dimensional figures. MA.3.GR.1.AP.3

2 Solve problems involving the perimeter and area of rectangles.

1 Explore area as an attribute of a two-dimensional figure that can be measured by covering the figure with unit squares without gaps or overlaps. MA.3.GR.2.AP.1

2 Find the area of a rectangle with whole-number side lengths by counting unit squares. Explore that the area is the same as what would be found by multiplying the side lengths. MA.3.GR.2.AP.2

3 Solve mathematical and real-world problems involving the perimeter and area of rectangles with whole-number side lengths using a visual model. MA.3.GR.2.AP.3

4 Explore the perimeter and area of composite figures composed of two non-overlapping rectangles with whole-number side lengths. MA.3.GR.2.AP.4

Measurement

1 Measure attributes of objects and solve problems involving measurement.

1a Select and use appropriate tools to measure the length (i.e., inches, feet, yards) of an object. MA.3.M.1.AP.1A

1b Explore selecting and using appropriate tools to measure liquid volume (i.e., gallons, quarts, pints, cups) and temperature in degrees Fahrenheit. MA.3.M.1.AP.1B

2a Solve one- and two-step addition and subtraction real-world problems within 100 with whole number lengths (i.e., inches, feet, yards), temperatures (i.e., degrees Fahrenheit) or liquid volumes (i.e., gallons, quarts, pints, cups). MA.3.M.1.AP.2A

2b Solve one-step multiplication and division real-world problems with whole number lengths (i.e., inches, feet, yards), temperatures (i.e., degrees Fahrenheit) or liquid volumes (i.e., gallons, quarts, pints and cups). Multiplication may not exceed two single-digit whole numbers and their related division facts. MA.3.M.1.AP.2B

2 Tell and write time and solve problems involving time.

1 Using analog and digital clocks, express the time to the nearest five minutes using a.m. and p.m. appropriately. MA.3.M.2.AP.1

2 Solve for end time in one-step real-world problems when given start time and elapsed time in whole hours or minutes within the hour. MA.3.M.2.AP.2

Number Sense and Operations

1 Understand the place value of four-digit numbers.

1 Read and generate numbers from 0 to 1,000 using standard form and expanded form. MA.3.NSO.1.AP.1

2 Compose and decompose three-digit numbers using hundreds, tens and ones. Demonstrate each composition or decomposition with objects, drawings, expressions or equations. MA.3.NSO.1.AP.2

3 Plot, order and compare whole numbers up to 1,000. MA.3.NSO.1.AP.3

4 Round whole numbers from 0 to 1,000 to the nearest 100 with visual support. MA.3.NSO.1.AP.4

2 **Add and subtract multi-digit whole numbers. Build an understanding of multiplication and division operations.**

1. Apply a strategy to add and subtract two two-digit whole numbers. MA.3.NSO.2.AP.1
2. Explore the concept of multiplication of two single-digit whole numbers using objects. MA.3.NSO.2.AP.2
3. Explore multiplying a one-digit whole number by 10. MA.3.NSO.2.AP.3
4. Explore the relationship between multiplication and division in order to multiply and divide. Multiplication may not exceed two single-digit whole numbers and their related division facts. MA.3.NSO.2.AP.4